

72, Horikawa-cho Saiwai-ku Kawasaki-shi Kanagawa-ken 210(JP)

(54) Nonvolatile semiconductor memory device.

(57) A nonvolatile semiconductor memory device comprising a matrix array of memory cells, word lines for driving the rows of memory cells, bit lines for reading data from columns of memory cells, a plurality of first MOS transistors provided for these bit lines, respectively, a second MOS transistor having a source coupled to the bit lines by the first MOS transistors, a drain coupled to a VCC terminal, and a gate connected to receive a predetermined bias voltage, a row decoder for selecting one of the word lines in accordance with a row-address signal, and a column decoder for turning on one of the first MOS transistors in accordance with a column-address signal. The memory device further has a CE terminal for receiving a test-mode signal, an OE terminal for receiving first and second control signals, and a control circuit for detecting a test mode, thereby prohibiting the operation of the row decoder in response to the first control signal, and permitting the operation of the row decoder in response to the second control signal.

(74) Representative: Lehn, Werner, Dipl.-Ing. et al Hoffmann, Eitle & Partner Patentanwälte Arabellastrasse 4 W-8000 München 81(DE)



- (21) Application number: 87104660.3
- (30) Priority: 31.03.86 JP 71139/86
- (43) Date of publication of application:
- Designated Contracting States:
- (88) Date of deferred publication of the search report:
- Applicant: KABUSHIKI KAISHA TOSHIBA
- (72) Inventor: Atsumi, Shigeru Patent Divsion K.K. Toshiba 1-1 Shibaura 1-chome



European Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 87 10 4660

DOCUMENTS CONSIDERED TO BE RELEVANT					
ategory		h indication, where appropriate, vant passages		elevant o claim	CLASSIFICATION OF THE APPLICATION (Int. CI.5)
х	GB-A-2 144 006 (TOKYO * Abstract; figures 3,18; pag		ne 9 *		G 11 C 17 00
Y A Y	PATENT ABSTRACTS OF (P-379)[1918], 13th August & JP-A-60 59 599 (NIPPON * Whole document *	1985;	9 3,4 9	-,8	
A	IDEM		1,3	i,8,10	
					TECHNICAL FIELDS SEARCHED (Int. Cl.5)
		•			G 11 C 17 G 11 C 29 G 11 C 8
The present search report has been drawn up for all claims					
Place of search Date of completion of search					Examiner
Y : A : O :	The Hague CATEGORY OF CITED DOCU particularly relevant if taken alone particularly relevant if combined wit document of the same catagory technological background non-written disclosure intermediate document		E: earlier pate the filing d D: document L: document	ate cited in th cited for o	ther reasons